

Robert Edwin Paull - Professor and Researcher
Instruction 20%, Research 60%, Extension 10%, Service 10%
2025 April 09. Wednesday - Last five years

Education:

1962-1965	University of Sydney, Sydney, Australia B.Sc. Agr. - April 1966, Major - Agronomy
1970-1974	University of California, Berkeley, California PhD - November 1974, Major - Plant Physiology

Other Training and Certificates:

Private Pilot Certificate #2118027.
1983 Short Course; "Postharvest Technology", University of California, Davis.
1986 Workshop; "Chairing the Academic Department", UH - Manoa.
1997 Workshop; "New Administrators Workshop", University of Nebraska.
2001/2002 Leadership Training - ESCOP-ACOP

Professional Appointments:

1985 - Present	Professor - Plant Physiologist
1982 - 1985	Associate Professor - Plant Physiologist
1979 - 1982	Assistant Professor - Plant Physiologist, University of Hawaii.
1977 - 1978	Post-Doctoral Fellow, Plant Physiology Unit Division of Food Research C.S.I.R.O.- Macquarie University, North Ryde, N.S.W., Australia
1976 - 1976	Post-Doctoral Fellow with Professor R. L. Jones, Department of Botany University of California, Berkeley, CA 94720
1975 - 1975	Post-Doctoral Fellow with Professor M. Chrispeels, Department of Biology, University of California, San Diego, CA 92037
1974 - 1975	Post-Doctoral Fellow with Professor R. L. Jones, Department of Botany, University of California, Berkeley, CA 94720
1970 - 1974	Research Assistant/Student, Department of Soils and Plant Nutrition, University of California, Berkeley. Plant Physiology
1966 - 1969	Research Agronomist - Grade II. Department of Agriculture Agricultural Research Station, Narrabri, N.S.W., Australia

Teaching:

- a) TPSS 473 Postharvest Handling: Lectures and laboratory (Undergraduate course)
- b) TPSS 470 Introductory Plant Physiology (Undergraduate course)
- c) TPSS 470L Introductory Plant Physiology Laboratory (Undergraduate course)

Publications:

Chapters in Books

Paull, R. E. and Oliveira, J.G. 2020. Chapter 17.3 Tropical Fruits: Papaya. Pp 373-379. In:
Maria Isabel Gil and Randolph Beaudry (Eds). Controlled and Modified Atmospheres for

- Fresh and Fresh-Cut Produce, Academic Press. <https://doi.org/10.1016/B978-0-12-804599-2.00024-7>
- Paull, R. E.** and Chen, N.J. 2020. Tropical Fruits: Pineapple. Pp 381-388. In: Maria Isabel Gil and Randolph Beaudry (Eds). Controlled and Modified Atmospheres for Fresh and Fresh-Cut Produce, Academic Press. <https://doi.org/10.1016/B978-0-12-804599-2.00025-9>
- Muda, P., N. J. Chen and **R. E. Paull**, 2020. Postharvest Handling, Storage and Quality. In. The Papaya: Botany, Production and Uses. Edited by S. Mitra. Chapter 16. pp 237-251 CAB International. <http://dx.doi.org/10.1079/9781789241907.0000>
- Oliveira, JG; Fonseca, MJO; Morales, LMM; **Paull, RE**; 2020. Colheita e Pós-colheita In: Salomão, LCC; Siqueira, DL; Borém, A (Eds) Mamão do Plantio à Colheita. Editora UFV, Viçosa, MG. pp.236-263
- Paull, R. E.** and Oliveira, J.G. 2020. Chapter 17.3 Tropical Fruits: Papaya. Pp 373-379. In: Maria Isabel Gil and Randolph Beaudry (Eds). Controlled and Modified Atmospheres for Fresh and Fresh-Cut Produce, Academic Press. <https://doi.org/10.1016/B978-0-12-804599-2.00024-7>
- Paull, R. E.** and Chen, N.J. 2020. Tropical Fruits: Pineapple. Pp 381-388. In: Maria Isabel Gil and Randolph Beaudry (Eds). Controlled and Modified Atmospheres for Fresh and Fresh-Cut Produce, Academic Press. <https://doi.org/10.1016/B978-0-12-804599-2.00025-9>
- Muda, P., N. J. Chen and **R. E. Paull**, 2020. Postharvest Handling, Storage and Quality. p 237-251. In. S. Mitra (Ed). The Papaya: Botany, Production and Uses. Edited by S. Mitra. pp 237-251 CAB International. <https://doi.org/10.1079/9781789241907.0237>
- Ketsa, S., Wisutiamonkul, A., Palapol, Y. and **Paull, R.E.** (2019). The Durian: Botany, Horticulture and Utilization. Horticulture Reviews 47, 125-211. <https://doi.org/10.1002/9781119625407.ch4>

Peer Reviewed Journal Articles

- Wiseman, B. J., **R. E. Paull**, N. K. Lincoln and M. Wall. 2023. 1-methylcyclopropene and Harvest Maturity Impact ‘Ma’afala’ Breadfruit Postharvest Storage. HortScience 58 (6) 666-670. <https://doi.org/10.21273/HORTSCI17076-23>
- Paull, R. E.**, N. Ksouri, M. Kantar, D. Zerpa-Catanho, N. J. Chen, G. Uruu, J J. Yue, S. Y Guo, Y. Zheng, C. M. J.r Wai, R. Ming. 2023. Differential Gene Expression During Floral Transition in Pineapple. Plant Direct, 7(11), e541. <https://doi.org/10.1002/pld3.541>
- Leal, F., & **Paull, R. E.** (2022). The genus Annona: Botanical Characteristics, Horticultural Requirements and Uses. Crop Science, 63, 1030–1049. <https://doi.org/10.1002/csc2.20833>
- Leal, F., and **R. E. Paull**. 2022. The Soursop (Annona muricata): Botany, Horticulture and Utilization. Crop Science, 63, 362–389. <https://doi.org/10.1002/csc2.20894>
- Paull, R. E.**, Zerpa-Catanho, D., Chen, N. J., Uruu, G., Wai, C. M. J., & Kantar, M. (2022). Taro raphide-associated proteins: Allergens and crystal growth. Plant Direct, 6(9), e443. <https://doi.org/10.1002/pld3.443>
- Paull, R. E.**, B. Wiseman, G. Uruu. 2022. Pineapple Field Establishment Using Slips. HortScience. 57 (12) 1540-1546, <https://doi.org/10.21273/HORTSCI16877-22>
- Yue J-J, R. VanBuren, J. Liu, JP Fang, XT. Zhang, ZY Liao, CM. Wai, XM. Xu, S Chen, SC. Zhang, XK. Ma, YY. M, HY. Yu, J. Lin, P. Zhou, YJ Huang, B. Deng, F. Deng, XB. Zhao, HS. Yan, M. Fatima, D. Zerpa, XD. Zhang, ZC. Lin, M. Yang, N. Chen, E. Mora-Newcomer, P. Quesada-Rojas, DA. Bogantes, V. Jiménez, HB. Tang, JS. Zhang, ML.

- Wang, **RE. Paull**, QY. Yu. 2022. SunUp and Sunset genomes revealed impact of particle bombardment mediated transformation and domestication history in papaya. *Nature Genetics* 54:715-724. <https://doi.org/10.1038/s41588-022-01068-1>
- Wang, D., R. Imel, **R. E. Paull**, and M. Kantar. 2021. An online learning module for plant growth analysis using high-throughput phenotyping data. *Natural Sciences Education*. Article ID: NSE220056, <http://dx.doi.org/10.1002/nse2.20056>
- Guillén, F. J. Medina-Santamarina, M. E. García-Pastor, N. J. Chen, G. Uruu, **R. E. Paull**. 2021. Postharvest melatonin treatment delays senescence and increases chilling tolerance in pineapple. *LWT Food Science and Technology* 169, 1133989. <https://doi.org/10.1016/j.lwt.2022.1133989>
- Murai, K., N. J. Chen and **R. E. Paull** 2021. Pineapple Crown and Slip Removal on Fruit Quality and Translucency. *Scientia Horticulturae* 283, 110087. <https://doi.org/10.1016/j.scienta.2021.110087>
- Hobbs, J., P. Prakash, **R. Paull**, H. Hovhannisyan, B. Markowicz, and G. Rose. 2021. Large-Scale Pineapple Flower Counting through Deep Density-Estimation. *Frontiers in Plant Science*. 11, article #2157. <https://doi.org/10.3389/fpls.2020.599705>
- Paull, R. E.**, G. Uruu and N. J. Chen. 2020. Rapid Field Assay for Pineapple Fruit Acidity. *HortTechnology* 30, 593-596. <https://doi.org/10.21273/HORTTECH04664-20>
- Zhou, L. L., M. E. Q. Reyes, and **R. E. Paull**. 2020. Papaya (*Carica papaya* L.) leaf area estimation and single-leaf net photosynthetic CO₂ assimilation rate following leaf defoliation and fruit thinning. *HortScience* 55, 1861-1864 <https://doi.org/10.21273/HORTSCI15345-20>
- Paull, R.E.** and Chen, N.J. (2020). Tropical fruit genomes and postharvest technologies. *Acta Hortic.* 1299, 113-122 <https://doi.org/10.17660/ActaHortic.2020.1299.18>
- Paull, R. E.**, and G. Uruu. 2020. Reducing Moringa Leaflet Abscission After Irradiation and During Shipping. *HortTechnology* 31, 74-76. <https://doi.org/10.21273/HORTTECH04738-20>
- Chen, L.-Y., R. VanBuren, M. Paris, H. Zhou, X. Zhang, C. M. Wai, H. Yan, S. Chen, M. Alonge, S. Ramakrishnan, Z. Liao, J. Liu, J. Lin, J. Yue, M. Fatima, Z. Lin, J. Zhang, L. Huang, H. Wang, T.-Y. Hwa, S.-M. Kao, J. Y. Choi, A. Sharma, J. Song, L. Wang, W. C. Yim, J. C. Cushman, **R. E. Paull**, T. Matsumoto, Y. Qin, Q. Wu, J. Wang, Q. Yu, J. Wu, S. Zhang, P. Boches, C.-W. Tung, M.-L. Wang, G. Coppens d'Eeckenbrugge, G. M. Sanewski, M. D. Purugganan, M. C. Schatz, J. L. Bennetzen, C. Lexer and R. Ming (2019). "The bracteatus pineapple genome and domestication of clonally propagated crops." *Nature Genetics* <https://www.nature.com/articles/s41588-019-0506-8.pdf>
- Kotepong, P., **Paull, R. E.**, and Ketsa, S. (2019) Anthocyanin accumulation and differential gene expression in wild-type and mutant of 'Saraek' Malay apple (*Syzygium malaccense*) fruit during growth and ripening. *Biologia Plantarum* 63, 710-720. <https://doi.org/10.32615/bp.2019.068>

Extension Publications

- Love, K & **R. E. Paull**. 2025. Maprang. University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources. Fruit, Nut, and Beverage Crops, FN-68. <https://www.ctahr.hawaii.edu/oc/freepubs/pdf/FN-68.pdf>

- Love, K & **R. E. Paull**. 2025. Achachairú. University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources. Fruit, Nut, and Beverage Crops, FN-68. <https://www.ctahr.hawaii.edu/oc/freepubs/pdf/FN-69.pdf>
- Wiseman, B. R. Paull, N. Lincoln & M. Wall. 2023. Ma'afala Breadfruit: When to Harvest? University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources. Fruit, Nut, and Beverage Crops, FN-66. <https://www.ctahr.hawaii.edu/oc/freepubs/pdf/FN-66.pdf>
- Kirk, E., K. Tavares, T. Radovich, K. Flanagan, J.P. Bingham, J. Calpito, S. Wages, A. Ahmad, J. Uyeda, **R. E. Paull**, J. Silva, E. Collier, J. Sugano. 2023. Hawai'i Turmeric Production Guidelines. Fruit, Nut, Beverage Crops VC-09. <https://www.ctahr.hawaii.edu/oc/freepubs/pdf/VC-9.pdf>
- Wiseman, B., **R. E. Paull**, N. Lincoln, & M. Wall. 2022. When to harvest? -Intersegment-space color and skin color indicate harvest maturity in Ma'afala breadfruit. Poster at 2022 Hawaii Ag Conference (Sep 27-28) at Hawaii Convention Center, Honolulu.
- Uyeda, J., K. Tavares, **R. E. Paull**, S. Wages & L. Baligad. 2022. Garlic Production Guidelines for Hawai'i. University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources, Vegetables and Root Crops VC-8, <https://www.ctahr.hawaii.edu/oc/freepubs/pdf/VC-8.pdf>
- Wiseman, B., N. J. Chen, N. Linclon and **R. E. Paull**. 2021. 'Ulu – Breadfruit Postharvest Handling and Quality Maintenance Guidelines. University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources. Fruit, Nut, and Beverage Crops, FN-58. <https://www.ctahr.hawaii.edu/oc/freepubs/pdf/FN-58.pdf>
- Paull, R. E.** and Gail Uruu. 2021. Major Weeds in Pineapple Fields of Hawai'i. University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources. Fruit, Nut, and Beverage Crops, FN-60. <https://www.ctahr.hawaii.edu/oc/freepubs/pdf/FN-60.pdf>
- Love, K., and **Paull, R.E.** (2020). Finger Limes. University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources. Fruit, Nut, and Beverage Crops, FN-56 <https://www.ctahr.hawaii.edu/oc/freepubs/pdf/FN%2056.pdf>
- Love, K., and **Paull, R.E.** (2020). Bush Tucker in Hawaii. University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources. Fruit, Nut, and Beverage Crops, FN-57. <https://www.ctahr.hawaii.edu/oc/freepubs/pdf/FN-57.pdf>
- Paull, R. E.** and N. J. Chen (2020). Pineapple Production and Fruit Quality. Web-Presentation. Queensland Pineapple Grower Association, November 30. <https://drive.google.com/file/d/16EHc24CASX3w3eEEkI4XPg3omMQpQ1N2/view?usp=sharing>
- Love, K., Gasik, L. and **Paull, R.E.** (2019). Durian. University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources. Fruit, Nut, and Beverage Crops, F_N-53. https://www.ctahr.hawaii.edu/oc/freepubs/pdf/F_N-53.pdf

Leadership Roles (Committee, Boards, Advisory, etc.) (Current)

2022 Aug-2024 July	CTAHR Faculty Senator
	Member of Instruction Committee
2023 May-2027 May	UHPA - Board of Directors Member
2023 Aug-2024 July	Manoa Faculty Senate
	Member Committee on Administration and Budget
2025 Aug-2027 July	Manoa Faculty Senator for CTAHR

2006 to Present	Associate Editor, Tropical Plant Biology
2020 July to 2023 June	ASHS Fellows Screening Committee Member
2023 July – present	ASHS Horticulture Hall of Fame Committee

Graduate Students

	Current	Career
MSc. - <i>Chairman</i>	0	12
- <i>Member</i>	3	10
PhD. - <i>Chairman</i>	1	14
- <i>Member</i>	2	24

Cooperating Graduate Faculty Member

Food Sciences Program in Department of Human Nutrition, Food and Animal Sciences, University of Hawaii at Manoa

Grant Support (*Current*)

Title Sustainable and Profitable Production of Specialty Crops in a Changing Environment
Source USDA-ARS
Total value \$60,708
Dates 2025 Oct to 2027 Sept
Role Co-PI on sub-award.

Title Preharvest and Postharvest Technologies to Improve Production, Disease Management and Quality of Papaya and Other Tropical Fruit
Source USDA-ARS 58-2040-9-015
Total value \$80,900
Dates 2022 Oct to 2024 Sept
Role Co-PI on sub-award.

Conference Presentations, Papers and Abstracts

Paull, R.E. and Chen, N.J. (2019) Overall Dragon Fruit Production and Global Marketing. pp1-9. In. Y2019 FFTC and VAAS-SOFRI joint workshop. “Dragon Fruit Network: Marketing and the Whole Value Chain”. and Steering Committee Meeting, My Tho city, Vietnam, September 9 to 11, 2019. Vietnam Academy of Agricultural Sciences, Food & Fertilizer Technology Center, and Southern Horticultural Research Institute.

Hobbs, J., Paull, RE., Markowicz, B., Rose, G. 2020. Use of aerial imagery for automated pineapple flower counting. 2020. (Blog-Post) Harvard Center for Research on Computation and Society (CRCS) Workshop on AI for Social Good. In conjunction with the International Joint Conferences on Artificial Intelligence (IJCAI). July 20-21. <https://crs.seas.harvard.edu/publications/flowering-density-estimation-aerial-imagery-automated-pineapple-flower-counting> (Accessed 2020 August 26)

- Paull, R. E. 2020. Dragon Fruit Improved Production. 30th Hawaii Tropical Fruit Growers Association Annual Conference. 2020 September 21 Q&A October 2 Online. <https://davedoucette.wixsite.com/htfg/2020-conference>
- Paull, R. 2020. Pineapple Production, Handling and the Cold Chain. International Symposium on Fresh Fruit and Vegetable Postharvest Handling and Cold Chain Application, Taichung, Taiwan, November 04. Reorganized with online presentation. 2020 November 03
- Wiseman BJ, Lincoln NK, Wall MM, Paull RC. 2022. Influence of Maturity and 1-MCP on Postharvest Ripening of Breadfruit [abstract]. HortScience 57(9S): S111. <https://doi.org/10.21273/HORTSCI.57.9S.S1>